

DILBAZI, G. I.-

Dissertation: "Toxic Effect of Gossypol and Measures for Controlling It."  
Cand Vet Sci, Azerbaydzhan Agricultural Inst, 23 Apr 54. (Bakinskiy Rabochiy,  
Baku, 14 Apr 54)

SO: SUM 243, 19 Oct 1954

DIBAZI-G.I.

Furacilin in veterinary practice. G. I. Dibazi (Vet. Polyclinic, Kirovabad). *Veterinariyu* 33, No. 6, 80-1 (1950).—Furacilin, a synthetic drug, is recommended for use in cases of cystitis, stomatitis, hoof-and-mouth disease, and gynecological diseases of animals. It can be used in aqueous solution or as an ointment; its ointment with asphthalan grease is stable indefinitely. *G. M. Karolapov*

DILBER, N.

"Basic revision of veterans' protection." p. 26. (Socijalna Politika. Vol. 3, no. 6, June 1953  
Beograd.)

SO: Monthly List of East European Accessions, Vol. 3, no. 6, Library of Congress, June 1954.  
Uncl.

DILCHEV. Kh.

Sub-dosage in roentgenotherapy. Khirurgia, Sofia 12 no.7:648-650  
'59.

(RADIOTHERAPY)

DIL'DAROV, I. YE.

VILENSKIY, L.I., prof., doktor med.nauk; ANSHELEVICH, V.A.; DIL'DAROV, I.Ye.  
(Riga)

Temporary incapacity in coronary insufficiency. Sov.med. 22  
no.2:15-21 F '58. (MIRA 11:4)

(CORONARY DISEASE

length of invalidism)

(DISABILITY EVALUATION, in various dis.

coronary insuf., length of invalidism)

DIL'DAROV, I.Ye. (Riga)

Quality of the diagnosis of diseases of the respiratory organs in out-patient polyclinics. Sov. zdrav. 21 no.5:30-36 '62; (MIRA 15:5)

J. Iz polikliniki No.4 Rigi (glavnyy vrach I.Ye. Dil'darov, nauchnyy rukovoditel' - prof. Ye.E.Ben).  
(RESPIRATORY ORGANS—DISEASES)

DIL'DEN, M., inzh.

Equipment for assembling large-panel houses. Stroitel'  
no.11:15-18 N '59. (MIRA 13:3)  
(Concrete slabs--Transportation)  
(Building machinery)

DIL'DIN, M.

Water-cooling towers can be built more rapidly. Stroitel' 2 no.6:14-  
15 Fe '56. (MLRA 10:1)

(Cooling towers)



DIL'DIN, M., inzhener.

~~Reconstructed~~

Reconstructed threading die for drum straighteners, Stroitel' 2 no.9:14  
S '56. (MIRA 10:1)

(Dies (Metal-working))

DIL'DIN, M.

~~\_\_\_\_\_~~  
Making large-panel partitions in horizontal forms. Stroitel'  
no.7:23 J1 '59. (MIRA 12:10)

1. Nachal'nik otдела Orgstroya Nauchno-issledovatel'skogo  
instituta organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi  
stroitel'stvu.  
(Concrete slabs)

GEL'FOND, S. (g.Odessa); SHEGANOV, A. (g.Chernigov); SMETANINA, Z., pryadil'-  
shchitsa, udarnik kommunisticheskogo truda; DIL'DIN, M., rabochiy;  
SKRIPKIN, P. (g.Ulan-Ude); FILIPPOV, A. (g.Petropavlovsk); CHERNYKH,  
Vl. (g.Kursk)

From letters to the editors. Sov. profsoiuzy 16 no.21:54-57 N '60.  
(MIRA 13:10)

1. Fabrika imeni Balashova, g.Ivanovo (for Smetanina). 2. Sovkhoz  
"Teplichnyy", Moskovskaya obl. (for Dil'din).  
(Trade unions)

GRECHUSHNIKOV, G.; DIL'DIN, M.

Helping the assemblers of series 1-464 large-panel houses.  
Stroitel' no.5:19-21 My '61. (MIRA 14:6)

1. Glavnyy inzhener Gosudarstvennogo instituta po vnedreniyu  
peredovykh metodov raboty i truda v stroitel'-tve (for Grechushnikov).  
(Reinforced concrete construction--Equipment and supplies)

SAVENKOV, V., kolkhoznik; DIL'DIN, M.; PANTELEYEV, V.;  
TERENT'YEV, N., inzh.

Readers' letters. Sel', stroi. no.10:30 0 '62. (MIRA 15:11)

1. Nachal'nik otдела Giproorgsel'stroya (for Dil'din).
  2. Nachal'nik otдела sel'skogo stroitel'stva Gosstroya  
Estonskoy SSR (for Panteleyev).
- (Construction industry)

DIL'DIN, M.S.; VASINA, I.N.; VORONIN, A.D.; GROMOVAYA, V.B.; PANKOVETS,  
P.L.; GRECHUSHNIKOV, G.A., inzh., red.

[Album of designs for devices, implements, and instruments  
for assembling large-block buildings] Al'bom chertezhei pri-  
sposoblenii, inventaria i instrumentov dlia montazha krupno-  
blochnykh zdanii. Vypusk KB-2. Moskva, Biuro tekhn.infor-  
matsii, 1958. 155 p. (MIRA 12:9)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut  
organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroi-  
tel'stvu. 2. Sotrudniki Orgstroya Nauchno-issledovatel'skogo  
instituta organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi  
stroitel'stvu Akademii stroitel'stva i arkhitektury SSSR (for  
Dil'din, Vasina, Voronin, Gromovaya, Pankovets).  
(Building--Tools and implements)

VORONIN, A.D.; DIL'DIN, M.S.; DUBROVIN, F.M.; GORDEYEV, P.A., red.;  
KASIMOV, D.Ya., tekhn. red.

[Album of drawings of equipment, devices and tools for the erection of large-panel houses of the l-464, l-335, and l-468 series] Al'bom chertezhei inventariia, prisposoblenii i instrumentov dlia montazha krupnopanel'nykh domov serii l-464, l-335 i l-468. Moskva, Gosstroizdat. No.1. 1963. 183 p. (MIRA 17:1)

1. Gosudarstvennyy proyektnyy institut po organizatsii sel'skogo stroitel'stva i okazaniyu tekhnicheskoy pomoshchi.

DIL'MAN, V.M.

Pituitary inhibitors. Effect of sigetin on the development of the uterus in prepuberal mice. Biul.eksp.biol.i med. 47 no.8:104-106 Ag '59. (MIRA 12:11)

1. Iz endokrinologicheskogo kabineta Instituta onkologii (dir. - deystvitel'nyy chlen AMN SSSR A.I. Serebrov), Leningrad. Predstavlena akademikom K.M. Bykovym [deceased].

(ESTROGENS pharmacol.)

(UTERUS pharmacol.)



DILENDIK, N. N.

DILENDIK, N. N.

"The Agriculturally Valuable Exotics of Belorussia and the Organization of Their Plantings in Seed Sectors." Cand Agr Sci, Inst of Socialized Agriculture, Acad Sci Belorussian SS R, Gomel', 1954. (KL, No 12, Mar 55)

SO: Sum. No. 670, 29 Sep 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

*Dilendik N.N.*

USSR/Forestry - Forest Plants.

K-5

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10615

Author : Dilendik, N.N.

Inst : ~~USSR Academy of Sciences, Institute of Forestry~~

Title : Let Us Extend the Red Oak In the Forests of Belorussiya

Orig Pub : Kolkhoznik Belorussii, 1956, No 11, 37.

Abstract : Since 1953 a study has been made of the red oak under various soil conditions of Belorussiya. The researches have indicated that the red oak grows faster than the British oak. Thus, in the Borets forest area of the Ivatsevich Forest Economy the average diameter of the red oak, when planted in pine-oak plantations on turf-podzolic, sandy soil with a rubble base, was 75-80% greater, and the average height was 15-30% greater at 18 years of age, than the diameter and height of 23-year old British oaks planted on argillaceous soils. Various engineering-technical measures on production of the crops are given.

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DILENDIK, N. N.

Introduce courses on "roadside tree planting." Avt. dor. 20 no.2:  
31-32 F '57. (MLRA 10:4)

1. Prepodavatel' Gomel'skego avtomobil'no-dorozhnogo tekhnika.  
(Road improvement)

DILENDIK, N.N., kand. sel'skokhozyaystvennykh nauk

Plant nut trees on roadsides. Avt.dor. 21 no.3:32 Mr '58.  
(Nut trees) (Roadside improvement) (MIRA 11:3)

DILENDIK, N.N., kand. sel'skokhoz. nauk; SAVCHENKO, agronom po zashchite rasteniy; MEZIN, A.F.; TOLMACHEVA, N.P., agronom po zashchite rasteniy (Moskovskaya obl.)

Letters to the editor. Zashch. rast. ot vred. i bol. 6 no.4:12  
Ap '61. (MIRA 15:6)

1. Belorusskiy nauchno-issledovatel'skiy institut lesnogo khozyaystva, g. Gomel' (for Dilendik).  
(Plants, Protection of)

DILENDIK, N.N.

Walnut in White Russia. Bot.; issl. Bel. otd. VBO no. 7:167-172  
'65. (MIRA 18:12)

POPESCU, Gr.; DRAGANESCU, N.; in colaborare cu TURCU, T. prof.;  
DILGEANU, I.; MINCULESCU M.

Serological study in encephalitis foci with endemic potential  
for the sheep-tick virus. Stud. cercet. inframicrobiol. 16 no.3:  
227-232 '65.

DILIGENSKAYA, I. A.

Characteristics of cardiovascular disorders in scarlet fever.  
Pediatriia, Moskva no.2:14-16 Mar-Apr 1953. (CJML 25:4)

1. Candidate Medical Sciences. 2. Of the Infectious Division of the Department of Children's Diseases of First Moscow Order of Lenin Medical Institute (Head of Department -- Yu. F. Dombrovskaya, Corresponding Member AMS) located at Children's Hospital imeni I. V. Busakov (Head Physician -- Docent V. A. Kruzkov).



DILIGENSKAYA, L.A., kand.med.nauk, DEMENT'YEVA, H.G.

Diagnosis of nephrolithiasis in children [with summary in English]  
Pediatrriia 36 no:5:72-77 My'58 (MIRA 11:6)

1. Iz kliniki detskikh bolezney I Moskovskogo ordena Lenina

DILIGENSKAYA, L.A.; VAL'TER, Ye.M.

Results of studying intestinal and pancreatic enzymes of the duodenal juice in children [with summary in English]. *Pediatrics* 37 no.3:22-27  
Mr '59. (MIRA 12:4)

1. Iz kliniki detskikh bolezney (dir. - deystvitel'nyy chlen AMN SSSR prof. Yu.F. Dombrovskaya) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.

(DUODENUM

juice, content of duodenal & pancreatic enzymes in  
child. with gastrointestinal & other dis. (Rus))

(ENZYMES

duodenal & pancreatic enzyme content of duodenal  
juice in child. with gastrointestinal & other dis.  
(Rus))

(GASTROINTESTINAL DISEASES, in inf. & child  
same)

DILIGENSKAYA, L.A.; BORODAYEVA, O.I.

Course of measles in adults and adolescents. Sov. med. 27 no.2:  
75-79 F '64. (MIRA 17:10)

1. Infektsionnoye otdeleniye kafedry detskikh bolezney (zav. -  
deystvitel'nyy chlen AMN SSSR prof. Yu.F. Dombrovskaya) i Moskovs-  
k go ordena Lenina meditsinskogo instituta imeni Sochenova na baze  
2-y Infektsionnoy gorodskoy klinicheskoy bol'nitsy (glavnyy vrach  
A.M. Pyl'tsova) Moskovskogo gorodskogo otdela zdravookhraneniya.

DILIGENSKAYA, N.

Diligenskaya, N. "A new electric tractor", Kul't.-prosvet. rabota, 1948, No. 12, p.25-26.

SO: U-2888, 12 Feb. 53, (Istopolis'Zhurnal 'nykh Statey, No. 2, 1949).

REZNIKOV, A.N., doktor tekhn.nauk, prof.; TEMNIKOV, A.V., kand.tekhn.nauk,  
dotsent; LIMONOV, I.P., inzh.; DILIGENSKIY, N.V., inzh.

Using the method of electric simulation in evaluating the temperature  
field of a cutting tool. Vest.mashinostr. 43 no.11:43-46 N '63.  
(MIRA 17'2)

DILIGENTSKIY, S. N.

28(1) P. 2

PHASE I BOOK EXPLOITATION SOV/2078

Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki

Avtomatika i telemekhanika; sbornik (Automation and Telemechanics; Collection of Articles) Moscow, 1958. 144 p. 5,000 copies printed

Resp. Ed.: Ya.Z. Tsypkin; Ed. of Publishing House: V.A. Kotov;  
Tech. Ed: I.N. Guseva

PURPOSE: This collection of articles is intended for specialists in automation and remote control.

COVERAGE: The book contains fifteen papers presented at the fourth and fifth scientific and technical conferences, held in 1955 and 1956, by junior members of the staff of the Institut avtomatiki i telemekhaniki (Institute of Automation and Telemechanics), Academy of Sciences, USSR. The papers are based on the individual research of their authors. The collection consists of five parts: Automatic Control, Components of Automatic and

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Remote Control Systems, Automated Electric Drive, Automatic Checking, and Remote Control.

TABLE OF CONTENTS:

Foreword

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AUTOMATIC CONTROL

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Diligenskiy, S.N. Position Stabilization of Relay Servo Systems 5

The author investigates the application of stabilizing feedback in relay-operated servo systems using constant-speed servomotors. Such systems are used, in particular, in automatic speed regulators. The author finds certain deficiencies relating to the dynamic characteristics of the system components. For example, the running-out of motors and the end action of relay operation, i.e., the release of contacts, result in a decline of stability and limit the static accuracy of the system. The author begins with determining the dynamic characteristics

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of individual components of the servo system. Then, through analysis of transient processes, he attempts to determine the shape of the correcting signal which must be reproduced by the stabilizing feedback. The introduction of this signal into the position servo system should provide conditions for a single switch-on, switch-off operation. This increase is determined by the minimum signal which operates the system. There are five Soviet references. No personalities are mentioned.

Pyshkin, I.V. Stability of Automatic Control Systems Equipped With a Key

21

The author describes three basic types of pulse-control systems and adds to these such systems in which the pulsing component is a key which periodically switches the feedback on and off. He finds the general form of the characteristic equation and the expression for the transient process caused by a jump-type signal in systems equipped with a key. This can be found when the roots of the characteristic equations

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being obtained for the open and closed position of the key. A system of the first order with delay and which is unstable in both the closed and open conditions can always be stabilized through the introduction of a key and the increase of the feedback gain factor. This conclusion was confirmed by the author by investigations on a model. There are five Soviet references. No personalities are mentioned.

Sinitzin, A.S. A Device for Experimental Determination of Servo System Frequency Response Characteristics 29

The author explains two methods of determining the dynamic characteristics of automatic control systems: 1) by applying signals representing periodic time functions and 2) by applying random signals. The latter method has as yet found little use. The author employed the first method. He mentions a set of infralow-frequency equipment (lot-produced by the SAM Plant) but considers this equipment not entirely satisfactory for investigating servo systems, especially closed-cycle systems operating on a-c. He describes in detail an apparatus developed in 1954 at

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IAT, Academy of Sciences, USSR, by which he was able to determine the frequency response characteristics of closed- and open-cycle servo systems. In these systems a-c or d-c voltage served as the input and output signals. The frequency range of the input signal was from 0.02 to 20cps. The author found that the apparatus ensures an accuracy of amplitude measurement of 1 to 2 per cent, of phase measurements within 1 degree and is sufficiently suitable for use. No personalities are mentioned. There are no references.

#### COMPONENTS OF AUTOMATIC AND REMOTE CONTROL SYSTEMS

Karibskiy, V.V. Principle of Operation of Magnetic Memory Devices  
(a Survey) 34

The author surveys existing types of magnetic storage devices and concentrates attention on ferrite core matrices, which he considers superior to all other known types. There are 10 references: 4 Soviet (including 1 translation), and 6 English. No personalities are mentioned.

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Maslov, A.A. Semiconductor Diode Function Generators of Specialized Type <sup>41</sup>

The author investigates some known semiconductor diode networks used for forming nonlinear blocks in analog simulation of nonlinear systems of automatic control. He compares vacuum-tube diode components with those of semiconductor diodes and finds that silicon diodes are the most accurate of all the types investigated. However, their use is limited because of their high cost. The author develops a new network using semiconductor diodes for the functions:  $e_{\text{output}} = 100 - e^2_{\text{input}} = 10\sqrt{e_{\text{input}}}$ . Results of experimental testing of this network are presented. There are 3 Soviet references. No personalities are mentioned.

Maslov, A.A. and A.D. Talantsev. Cathode-ray Tube Function Generators Based on the Principle of Controlled Scan <sup>49</sup>

The authors discuss networks based on the principle of dynamic compensation and used in analog simulation for solving certain nonlinear problems. As a new feature they introduce a cathode-ray tube (CRT), to be used as a null component. The paper

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describes some aspects of the work on investigating CRTs done at IAT in 1953-1954. The investigations showed that function generators based on dynamic compensation compare equally with those based on the static principle in regard to accuracy and speed of operation. However, the CRT component - the photomultiplier screen - becomes a source of drift and noise. Better results are obtained with a special CRT, having sealed shaped and receiving electrodes. There are 7 references, all Soviet, including 5 translations. No personalities are mentioned.

Electromagnetic Receivers of Frequency Signals  
With Coupled Vibrators

58

The author discusses the results obtained from investigating new electromechanical resonance components for audio frequencies. These components are characterized by the use of coupled vibrators, which permits approximating the selectivity characteristic of frequency signal receivers to an ideal rectangular shape. The characteristics obtained from experimental models of an electromechanical filter and frequency relay coincide fairly well

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with the calculated and have steep slopes. This fact increases the noiseproof features of these components and reduces the effect of signal-level fluctuation on the band width. There are 15 references: 12 Soviet (including 1 translation), 2 English, and 1 German. No personalities are mentioned.

AUTOMATED ELECTRIC DRIVE

Petelin, D.P. Mechanical Transient Processes of a Synchronous Motor With Frequency Control

74

The author investigates the qualitative and quantitative characteristics of mechanical transients in synchronous motors with frequency control for conditions of starting, braking and speed regulation. In analyzing the processes of starting synchronous motors by means of changing the frequency of the a-c supply from zero, the process of starting at reduced frequencies and the process of motor acceleration by a smooth change of frequency were investigated separately. It was found that synchronous acceleration and braking depend on the rate of frequency change. The author forms equations and makes an

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analysis of the free transient process of a synchronous generator-synchronous motor system. There are 11 references: 6 Soviet, 4 English and 1 German. No personalities are mentioned.

AUTOMATIC CHECKING

Mel'tser, L.V. Selection of Operating Conditions of a Phase Ionization Flowmeter

86

The author compares two kinds of ionization flowmeters, a pulse flowmeter and a phase flowmeter, both of which he describes in detail. He finds the latter to be more sensitive to current than the first because of the use of narrow-band amplifiers. In addition, a longer radiation time (trad) is usually selected for the phase flowmeter than for the pulse flowmeter, which contributes to better utilization of radiation. There are 5 references: 4 Soviet and 1 English. No personalities are mentioned.

Stakhovkiy, R.I. Causes of Instability of Gas Currents in an Analytical Mass Spectrometer and a Method of Periodic Automatic

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Calibration

• 91

The author presents experimental results of the practical application of periodic calibration in an experimental mass-spectrometer gas analyzer developed jointly by IAT and the Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut podzemnoy gazifikatsii ugley Ministerstva uglevoy promyshlennosti SSSR (All Union Scientific Research and Design Institute for the Underground Gasification of Coal, Ministry of the Coal Industry, USSR). Work on automatic calibration was begun at IAT in 1951 and is now being conducted in the USSR with good results but on a limited scale. The author also describes experiments on the quantitative determination of the effect of secondary electron emission in the ionization chamber on gas current. The method of automatic periodic calibration is one of the measures used to increase the accuracy of mass-spectrometer gas analyzers, and the author recommends its application for industrial gas analyzers of this type. There are 8 references: 4 Soviet, 3 English and 1 German.

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REMOTE CONTROL

Abdullayev, D.A. Some Problems of Building Remote Control Systems With Dispersed Points of Operation 109

The author investigates methods of discriminative selection of objects of remote control on the basis of efficient outlay of equipment so as to efficiently plan remote control systems with dispersed points of operation. The task is reduced to the design of remote control systems with the smallest outlay of relays in dispatching points. With a small number of objects in operational points, the author finds most efficient the principle of a "distributive switch", which was developed at the Remote Control Laboratory of IAT. There are 7 references: 6 Soviet and 1 English. No personalities are mentioned.

Kashirin, V.A. Optimum Time of Quantizing a Signal in the Presence of Noise 118

The author derives a formula for determining the optimum time of quantizing for the spectral function of a given signal, a given method of transmission, and a certain intensity of noise

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in the communications channel, which will result in the smallest total error. The author uses the Kotel'nikov theorem for his discussion. There are 3 Soviet references. No personalities are mentioned.

Ostianu, V.M. Cascade Method of Synthesizing Contact Circuits  
Equipped With Step Switches 122

The author discusses a method of synthesizing  $(1,k)$ -terminal networks with step switches, which is a generalization of the cascade method proposed by G.N. Povarov for synthesizing relay-contact  $(1,k)$ -terminal networks. Following G.N. Povarov, the author terms "cascade" connections those connections in which each output of the first multiterminal network is connected to one and only one input of the second multiterminal network. He presents an example of such synthesis. There are 8 references: 7 Soviet and 1 English.

Povarov, G.N. Cascade Method of Synthesizing Symmetrical Contact  
Circuits 127

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The author presents a graphical variant of the cascade method, specially adapted for synthesizing symmetrical and related (1,k)-terminal networks. He considers the graphical method to be a much simpler one for engineering purposes than the analytical method, as applied to (1,k) terminal networks. He suggests its use for the synthesis of quasi-symmetrical contact circuits and contact circuits having one input and one or several outputs. There are 9 references: 7 Soviet, 1 Czech and 1 English.

Silayev, V.N. Remote Control System for Dispersed Objects 133

The author attempts to find a solution for a remote control system which would be simple in structure, use a small number of wires, with the smallest possible amount of relay equipment at each control point, a sufficiently large radius of action, and be flexible and reliable in operation. He discusses several methods used and concludes that application of the principle of "distributive selection" with a dispersed switch gives satisfactory results, as demonstrated in laboratory tests over a four-month period. There are 3 Soviet references. No per-

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S/194/61/000/010/044/082  
D256/D301

AUTHOR: Diligenskiy, S.N.

TITLE: Differentiation of slowly-changing signals on a background of interference

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 10, 1961, 34, abstract 10 V299 (V sb. Avtomat. upravleniye, M., AN SSSR, 1960, 294 - 306)

TEXT: The approximation problem is considered of an impulse function describing a R.M.S. error differentiating filter with finite memory by a polynomial of r-th order, and recommendations are given for choosing the parameters of the polynomial. 4 references.  
[ Abstracter's note: Complete translation ]

VB

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DILIGENSKIY, S.N. (Moskva)

Differentiation of slowly varying signals. Avtom. i telem.  
21 no.4:513-524 Ap '60. (MIRA 13:6)  
(Information theory)

DILIGENSKIY, S. N.

Cand Tech Sci - (diss) "Differentiation of slowly changing signals." Moscow, 1961. 12 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Order of Lenin Power Inst); 150 copies; price not given; (KL, 10-61 sup, 214)

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D201/D306

9.3230(1132, 1159)

AUTHOR: Diligenskiy, S. N. (Moscow)

TITLE: Methods of realizing finite memory optimum filters

PERIODICAL: Avtomatika i telemekhanika, v. 22, no. 11, 1961,  
1441-1452

TEXT: In the present article the author considers first the methods of approximating the dynamic characteristics of practically easily realizable elements to the dynamic characteristics of a finite memory filter having at its input a signal  $y(t) = g(t) + n(t)$ . The signal  $y_{\text{opt}}(t)$  at the output of a finite memory filter is equal to

$$y_{\text{opt}}(t) = \int_{t-T}^t h_{\text{opt}}(t-\tau)y(\tau) d\tau \quad (10)$$

If the difference between the values of the argument (time t) cor-  
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responding to two neighboring values of  $y_{opt}$  is equal to the memory of the filter  $T$  then

$$y_{opt}(t_{i+1}) = \int_0^T h_{opt}(T - \tau) y(t_i + \tau) d\tau \quad (13)$$

which may be used as the basis of simulating a discrete filter having a finite memory. Such a system will, independently of the form of  $h_{opt}(\tau)$ , consist of the following elements: 1) an integrator, integrating a certain function of time during  $0 \leq t \leq T$ ; 2) an arrangement simulating the mirror weighting function over the period  $0 \leq t \leq T$ ; 3) a multiplier, continuously multiplying two functions by each other over a period  $0 \leq t \leq T$ . The weighting function  $h_{opt}(t)$  may be represented as the sum of a certain continuous function ( $\bar{h}_{opt}(t)$ ) during the interval  $(0, T)$  and of  $\delta$ -function with its

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derivatives. From the remaining components of the weighting functions only the  $\delta$ -functions (more exactly the  $\delta$ -function integrals) can be realized in a simple manner:

$$\Delta y_{\text{opt}} = \int_0^T [C_1 \delta(T - \tau) + D_1 \delta(\tau)] y(t_1 + \tau) d\tau = C_1 y(t_1 + T) + D_1 y(t_1)$$

Any finite memory discrete filter may be thus synthesized with an accuracy down to the derivatives of  $\delta$ -functions. Separate units of such filters may be realized using both analog and digital techniques. The additional dynamic error at the discrete finite memory filter may be reduced by two methods: 1) By constructing the filter from several discrete filters operating with a "phase shift" with respect to each other. The additional dynamic error will then be reduced to  $k$  times, where  $k$  is the number of discrete filters. 2) The magnitude of memory  $T$  should be so chosen as to take this error into account. Calculations show that in this case the addi-

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tional dynamic error may be reduced by as much as 50%. Finally the realization of an optimal filter differentiator is considered. The operator  $L(p)$  of such a filter is  $L(p) = T_{tr}P$ . Taking the dynamic characteristics of continuous and discrete differentiators as approximating to an optimum filter-differentiator, corresponding to the noise signal with correlation function

$$R(\tau) = B^2 e^{-\alpha|\tau|}$$

the optimum pulse transient response function of the filter-differentiator becomes

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$$h_{opt}^{(t)} = \frac{6}{T(\alpha^2 T^2 + 6\alpha T + 12)} [\alpha^2 T - 2\alpha^2 t + (2 + \alpha T) \delta(t) - (2 + \alpha T) \delta(t - T)] \quad (0 \leq t \leq T),$$

$$h_{opt}^{(t)} = 0 \quad (t < 0, t > T).$$

(15)

Two cases are considered. A) Approximation of pulse transient response of the filter differentiator with infinite memory  $h_{np}(t)$  to  $h_{opt}^{(t)}$ . The dynamic error at the filter output is determined by zero and first moments of the pulse transient of the system

$$|\varepsilon_H| \leq |g_{\max}^{(0)} \mu_{H0}| + |g_{\max}^{(2)} \mu_{H2}| \quad \text{at } T \leq t \leq \infty \quad (16)$$

where  $g_{\max}^{(0)}$  - maximum value of useful signal;  $g_{\max}^{(2)}$  - maximum value  
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of the second derivative of the useful signal;  $\mu_{H0}$  - zero moment of  $h_{HU}(t)$ ,  $\mu_{H2}$  - second moment of  $h_{H1}(t)$  ( $h_H$  being the pulse transient function of the system). Three forms of  $h_H(t)$  of a second order system are evaluated which show that the best approximation  $h_{opt\alpha}(t)$  is obtained when applying the transient function of the second order with multiple roots of the characteristic equation. B) Approximation of transient response of discrete differentiators  $h_{ud}(t)$  to  $h_{opt\alpha}(t)$ . The dynamic error at the output of a discrete differentiator at  $t > T$  is independent of time and depends mainly on the second moment. The comparison of interference-killing properties of continuous and discrete filters-differentiators shows that it is at least 3 times better in discrete filters-differentiators. There are 2 tables and 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: L. A. Zadeh, I. R. Ragazzini, An extension of Wiener's theory of Prediction. Journ. Appl. Phys., v. 21, 1950.

Card 6/7

Methods of realizing ...

SUBMITTED: April 24, 1961

<sup>31263</sup>  
S/103/61/022/011/003/014  
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<sup>42033</sup>  
S/103/62/023/011/003/007  
D201/D308

AUTHOR: Diligenskiy, S.N. (Moscow)

TITLE: Some structural diagrams and dynamic characteristics  
of digital regulators.

PERIODICAL: Avtomatika i telemekhanika, v. 23, no. 11, 1962,  
1451 -- 1464

TEXT: The structural diagrams of the following digital regulators are given and their operation discussed. 1) Ideal sampled-data proportional-integral regulator. 2) The sampled-data digital proportional-integral regulator with a step-by-step motor. 3) The sampled-data digital proportional-integral regulator with a constant speed motor stage. The analysis of operation of the above types of regulators leads to the following conclusions: 1. Expressing the proportional and integral components of the control law in the form of a unitary code makes it possible to achieve a proportional-integral on-off control to any degree of accuracy and to design the regulator using digital elements. It is possible to use for the output stages either step-by-step or constant speed motors. 2. The analysis of the Card 1/2

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dynamic characteristics of such digital regulators shows that: a. In an ideal proportional-integral regulator a limitation is imposed on the upper limit of the operating range of the frequency characteristic only. In an on-off digital proportional-integral regulator, in addition to the above, the proportional component has a limited lower frequency end and a limited range of changes of the input signal amplitudes, while the integral component has the last limitation only. b. Ranges of change of the proportionality coefficient and of the integration time constant are practically unlimited. Thanks are expressed to Ye.K. Krug. There are 2 tables and 7 figures. lx

SUBMITTED: February 24, 1962

Card 2/2

ACCESSION NR: AP4006822

S/0120/63/000/006/0082/0088

AUTHOR: Artamonov, Ye. I.; Diligenskiy, S. N.

TITLE: Electronic pulse oscillator

SOURCE: Pribery\* i tekhnika eksperimenta, no. 6, 1963, 82-88

TOPIC TAGS: oscillator, transistorized pulse oscillator, pulse oscillator, pulse generator

ABSTRACT: An electronic timer is described in which short pulses continuously generated by an h-f multivibrator are switched by semiconductor diodes and triodes in such a way that a number of RC "cells" are energized in succession. The last-cell pulse triggers the first cell and thus establishes a cycle. The individual cells have different time periods. Both single-ended and push-pull type circuits are considered. A time interval of from a few seconds to a few minutes is claimed possible. [Apparently, a laboratory hookup was tested]. The

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effect of temperature on Soviet-make resistors and capacitors was studied, as well as the effect of temperature on the entire device. It is claimed that, thanks to a built-in mutual compensation of temperature errors of the components, the timer has an overall error of only 0.8% within 20-60C of ambient temperature at a 2-4-min time interval; the same error occurs at supply-voltage variations of  $\pm 50\%$ . Orig. art. has: 6 figures, 12 formulas, and 3 tables.

ASSOCIATION: Institut avtomatiki i telemekhaniki AN SSSR (Institute of Automation and Telemechanics, AN SSSR)

SUBMITTED: 14Dec62

DATE ACQ: 24Jan64

ENCL: 00

SUB CODE: SD

NO REF SOV: 002

OTHER: 000

Card 2/2



L 33345-66 EWP(k)/EWT(d)/EWP(h)/EWP(l)/EWP(v) GD

ACC NR: AT6005905

SOURCE CODE: UR/0000/65/000/000/0239/0249

AUTHOR: Aleksandridi, T. M.; Dilligenskiy, S. N.; Krug, Ye. K.

ORG: None

TITLE: Digital controls

SOURCE: International Federation of Automatic Control. International Congress. 2d, Basel, 1963. Tekhnicheskiye sredstva avtomatiki (Technical means of automation); trudy kongressa. Moscow, Izd-vo Nauka, 1965, 239-249

TOPIC TAGS: control system, dynamic stability, digital system

ABSTRACT: In addition to specialized digital control systems, there is now a need for the development of all-purpose digital systems. The construction of such control systems is possible on the basis of an analysis of dynamic characteristics of digital systems. The present authors investigate some of the characteristics of the dynamic properties of digital controls and describe operational principles of single-channel and multi-channel digital controls. The all-purpose digital control systems examined incorporate the proportional-integral (PI) law of control. Other investigations have shown that PI controls assure high-quality control for many controlled plants. Orig. art. has: 8 figures and 10 formulas.

SUB CODE: 09 / SUBM DATE: 23Jun65 / ORIG REF: 004 / OTH REF: 003

Card 1/1

JS

L 43667-66

EMP(d)/EMP(r)/EMP(k)/EMP(h)/EMP(l)

EG

ACC NR: AP6023664

SOURCE CODE: UR/0103/66/000/004/0079/0087

AUTHOR: Diligenskiy, S. N. (Moscow)

ORG: none

TITLE: The accuracy of the reproduction in digital form of a class of control laws

SOURCE: Avtomatika i telemekhanika, no. 4, 1966, 79-87

TOPIC TAGS: analog digital conversion, automatic control theory, linear function, ~~operator~~, linear automatic control system

ABSTRACT: A study is made, based on harmonic analysis methods, of the accuracy of reproduction in digital form of certain basic operators (integration, proportional conversion, and differentiation) found in a class of control laws described in operator form as a linear combination of operators  $p^s$ :

$$F(p) = \sum_{s=-p}^q C_s p^s, \quad (1)$$

(where  $s = -p, \dots, -1, 0, 1, \dots, q$ ), with allowance for time and level quantizing, and also for the finite analog-to-digital conversion time. It is shown how, by assigning a permissible magnitude of distortion for certain characteristics, it is possible to select for a given opera-

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UDC: 681.142.621

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ACC NR: AP6023664

tor desirable values for the three constraints discussed. Accuracy estimations for the reproduction of fundamental control law operators based on first harmonic parameters and the effect of higher harmonics with a quantification time which is a multiple of the sinusoidal input signal periodicity, may prove useful in digital control system analysis (e.g., when studying the filtering properties of the continuous part of the system). The fact that operator reproduction error is a function of the exponent of the operator indicates that, when the maximum level quantizing step is limited, the accuracy with which derivatives can be obtained in digital form decreases as the exponent of the derivative increases. For all practical purposes, therefore, only the first or, at the very most, the second derivative can be derived in digital form. Orig. art. has: 2 tables, 4 figures, and 18 formulas.

SUB CODE: 09,12/ SUBM DATE: 10Jan65/ ORIG REF: 003/

JS

DILIGENSKIY, V., inzh.; LAZAREV, V., kand.tekhn.nauk; LITKHAR, M., inzh.

Burning liquefied gas. Zhil.-kom.khoz. 7 no.12:19-20 ' 57.  
(MIRA 11:12)

(Liquefied petroleum gas) (Stoves, Gas)

CITED SOURCE: Tr. Kuby'shevsk. svyats, in-t, vy'p. 16, ch. 2, 1963, 371-378

TOPIC TAGS: aerodynamics, turbulent diffusion, jet aircraft, turbulent diffusion torch, hydrocarbon combustion, jet contour, flame geometry

TRANSLATION: After a concise review of papers dealing with the study of turbulent diffusion flames, a report is given of the results of an experimental investigation into the geometrical characteristics of a vertical and oblique turbulent diffusion torch in an air environment at rest. A specially constructed test stand was used to conduct 149 series of experiments with flames formed during the combustion of hydrocarbon gases (natural gas of Buguruslan-Pokhivitsk origin and liquified gas). The formation of the torch and its geometry were studied for contoured (with smooth ramming) cylindrical

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L 20693-65

ACCESSION NR: AR4047555

(of constant length  $l$ ) and calibrated ( $l/d = 5$ ) nozzles or jets. The diameters of these jets ran from 2.1 to 8 mm. The angle of inclination  $\theta$  (with respect to the vertical) varied from 0 to 90°. The geometrical characteristics of the torch were measured visually and

where  $Q$  is the heat of combustion,  $W$  is the rate of consumption, and  $c_1$  and  $n$  are constants which are determined by the physical-chemical properties of the gas. The assumption is advanced that turbulent diffusion flame dimensions obtained photographically correspond to the conditions of the fundamental process of chemical reactions. Only partial agreement with the information given by other writers was achieved. Also presented are empirical equations for height, range (magnitude of the penetration of the torch in the horizontal plane) and axis of the stream for an inclined turbulent diffusion torch.

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ACCESSION NR: AR404755

It is pointed out that the calculated expressions given have been checked for jet diameters of  $2.0 \leq d \leq 5.0$  mm, inclination angles of  $0 \leq \theta \leq 90^\circ$  and in a range of Archimedes numbers of  $0.0027 \leq Ar \leq 0.0225$  (the criterion  $Ar$  was used in the form  $Ar = (gd/W^2)$  ( $g/cT$ ), where  $c$  is the heat capacity of the gas at a constant pressure). On the basis of

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L 14660-66 EWT(d)/EWT(l)/EWT(m)/EWP(f)/T-2 JD/WH/JW/JED  
ACC NR: AT6003110 SOURCE CODE: UR/3181/63/000/015/0371/0378

AUTHOR: Diligenskiy, V. N.

ORG: Kuybyshev Aviation Institute (Kuybyshevskiy aviatsionnyy institut); Joint  
Scientific-Technical Conference on Problems of the Mechanics of Liquid and Gas  
(Kustovaya nauchno-tehnicheskaya konferentsiya po voprosam mekhaniki zhidkosti i  
gaza)

TITLE: On determining the sizes of diffusion turbulent jet flames occurring in a

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ACC NR: AT6003110

11/2 44/55 4  
where  $Q$  is the heat of combustion,  $\gamma$  is the unit weight of the gas,  $V$  and  $V_B$  are the gas and air discharges,  $w$  is the gas discharge velocity,  $T_r$  and  $T_0$  are the theoretical temperature of combustion and the temperature of the ambient medium,  $D_T$  is the coefficient of turbulent diffusion,  $d$  and  $k$  are the diameter of the exhaust and the form coefficient,  $\phi$  is the angle between the axis of the jet and the vertical, and  $x$  is the flow coordinate. It is possible to determine the relative height of the turbulent flame with the use of the simple expression

$$\frac{h}{d} = \Phi(V^0; Ar; \gamma; k, x).$$

where  $V^0$  is the theoretically required quantity of air, and  $Ar$  is the Archimedes criterion taking into account global gravitational forces in comparison with the inertial forces of the stream. The form of this function is determined experimentally. A special test stand was set up for the purpose of studying the formation of diffusion flames and the geometric characteristics of jet flames. Several jet mechanisms were studied, with jet exhausts ranging from 2.1 to 8 mm in diameter. Tests were performed with discharge angles  $0^\circ$ -- $90^\circ$ . The test results were used in obtaining the empirical formulae

$$\frac{h_0}{d} = 0,01Q + c_1$$

$$\frac{h_n}{d} = 0,0565Q^{0,8} \cdot W^n$$

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ACC NR: AT6003110

for jet heights determined by photographic and visual means, respectively. The author concludes that the formation of hydrocarbon jet flames follows a principle so that a unique formula is sufficient for determining flame dimensions. Orig. art. has: 10 equations and 2 tables.

SUB CODE: 21, 13/ SUBM DATE: none/ ORIG REF: 007

Card

3/3

L 16106-66 EWT(m)/T JD/WW/JW/JWD/WE  
ACC NR: AT6003092

SOURCE CODE: UR/3181/63/000/015/0237/0244

AUTHOR: Diligenskiy, V. N.

ORG: Kuybyshev Aviation Institute (Kuybyshevskiy aviatsionnyy institut); Joint  
Scientific-Technical Conference on Problems of the Mechanics of Liquid and Gas B+1  
(Kustovaya nauchno-tekhnicheskaya konferentsiya po voprosam mekhaniki zhidkosti i  
gaza)

TITLE: Geometrical characteristics of a diffusion turbulence jet generated in an  
upward rising air stream

SOURCE: Kuybyshev. Aviatsionnyy institut. Trudy, no. 15, pt. 2, 1963. Doklady  
kustovoy nauchno-tekhnicheskoy konferentsii po voprosam mekhaniki zhidkosti i gaza  
(Reports of the Joint scientific-technical conference on problems of the mechanics  
of liquid and gas), 237-244

TOPIC TAGS: gas kinetics, exhaust gas analysis, exhaust flame, jet engine exhaust,  
jet flame, similitude, jet flow

ABSTRACT: The article deals with determination of the geometrical dimensions of  
diffusion turbulence flames in an upward rising air stream. The form of the flame

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is described by its height (h), range (D), the axial direction (y), and the angle of the opening ( $\theta$ ). Joint consideration of turbulent stream and combustion theory leads to the conclusion that the trajectory (axis) of the flame is some function

$$T = f(w_1, w_2, \rho_1, \rho_2, T_1, T_2, Q, V_1, V_2, D, \kappa, d, \alpha, \varphi, x),$$

where  $w_1$  and  $w_2$  are the air stream and gas exhaust velocities;  $\rho_1$  and  $\rho_2$  are the density of air in the stream and gas in the jet;  $T_1$  and  $T_2$  are the air stream and gas combustion temperatures;  $Q$  is the heat of combustion;  $V_1$  and  $V_2$  are the gas and air outflows of the combustion process;  $D$  is the coefficient of turbulent diffusion;  $d$  and  $\kappa$  are the diameter of the jet opening and the form coefficient;  $\theta$  is the angle of attack; and  $\alpha$  is the jet structure coefficient. Methods from the theory of similitude allow this function to be shortened to a function

$$\frac{y}{d} = \Phi(Ar, q_{21}, V^0, \kappa, \varphi, \frac{x}{d}),$$

where  $Ar$  is Archimedes' criterion,  $q_{21}$  is a hydrodynamic parameter,  $V^0$  a stoichiometric parameter, and  $\kappa$  is a form function. Experimental means were used in determining the appearance of this function. The author describes the experimental set-up, consisting of a chamber of constant static pressure from which air

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ACC NR: AT6003092

is driven by a ventilator device. A variable speed air stream is directed upwards from this chamber. The jet flame was adjustable to provide variation of the angle of attack with the air stream. Data were collected from 52 series of tests. The height of the slanted flame was found to obey the formula

$$\frac{h}{d} = 0,01 Q_n^p \cdot \cos \varphi + 50,$$

with the range given by

$$L = [(4,2 Q_n^{0,33} + 0,6 w_0) \sin \varphi] \left( 1 - 6,5 \frac{1}{q_{21}^{0,6}} \right)$$

Orig. art. has: 2 figures and 7 equations.

SUB CODE: 20, 13/ SUBM DATE: none/ ORIG REF: 005

Cord 3/3

COUNTRY : USSR  
COUNTRY : Baltic and Caucas. Fodder Grasses and Roots.

ABSTOUR. : RZhBiol., No.4, 1959, No. 15709

AUTHOR : Dilimbetov, K.  
INSTR. :  
TITLE : Sudan Grass is an Important Reserve for Increase  
of Forage Production.

ORIG.PUB. : S. Kh. Kazakhstan, 1958, No.2, 60-63

ABSTRACT : In 1954-56 experiments of the Kzyl-Ordinshaya  
agricultural test station the largest crop of  
green mass ( 180.1 c/h) was reaped with mowing  
at the start of flowering, but the fodder value  
was at the same time much lower than with mow-  
ing at earlier dates; moreover, the aftercrop  
was reduced. With sowings of sudan grass in  
the first decade of July as a stubble field  
crop after the harvesting of spring wheat, two  
: mowings with total green mass crop yield of

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ABST. JOUR. : RzhBiol., No.4, 1959,

No. 15709

TITLE

ABSTRACT

: 227 c/h were reaped in irrigated conditions.  
The grass mixture of vetch with sudan  
grass in an early correlation of components  
yields a crop reaching 60 c/h of hay in summer  
sowings, which is 4½ times higher than the  
crop of the vetch-oats mixture. The best sorts  
of sudan grass are Krasnoyarskaya 1967 and  
sorgo-sudan hybrid 19-58. The green mass of the  
latter can be used only for hay and ensilage,  
since it contains prussic acid.  
Ye.A. Okorokova

CARD

:2/2

101

GRYAZNOV, V.M.; SHIMULIS, V.I.; DILINGEROVA, T.V.

Adsorption and dehydrogenation of cyclohexane on platinum films  
at room temperature. Vest.Mosk.un.Ser.2: Khim. 17 no.2:26-28  
Mr-Ap '62. (MIRA 15:4)

1. Kafedra fizicheskoy khimii Moskovskogo universiteta.  
(Cyclohexane) (Adsorption) (Dehydrogenation)

DILYUNAS, I.P. [Diliunas, I.]; IODKAZIS, V.I. [Jodkazis, V.];  
SHTARKAS, Ye.M. [Starkas, E.], kand. med. nauk

Sanitary evaluation of the use of river water for artificial  
feeding of an intake of underground water. Gig. i san. 28  
no.7:64-69 JI '63. (MIRA 17:1)

1. Iz Vil'nyusskogo nauchno-issledovatel'skogo instituta  
epidemiologii i gigiyeny.



DILKOV, D.; VANGELOV, A.

Eye measuring of the humidity of the surface layer of the soil. p. 58  
Khidrologiia i meteorologiia No. 2, 1958, Sofia, Bulgaria

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 10,  
Oct. 58

DILKOV, D.

Distribution and exact measurement of the moisture in chernozem black  
earth. Khidro i meteorolog no.2:27-36 '60. (EEAI 10:1)  
(Soils) (Chernozem soils)

DILKOV, D.

Water and humidity requirement of maize under the chernozem  
conditions in Northern Bulgaria. Khidro i meteorolog no.5:3-13  
'62.

DILKOV, D.

The drought of May 1962. Khidro i meteorolog no.4:59-66 '62.

DILKOV, Dilko Iv., agr.

Moisture of the deep soil layers used by plants. Khidro'tekh i melior  
7 no.8:238-240 '62.

DILKOV, D.

Hydrologic profile of the carbonate chernozem soils in  
northern Bulgaria. Khidro i meteorolog 5 25-34 '63.

KHERSHKOVICH, E.; DILKOV, D.

Conditions and tasks of the agrometeorological service in the Bulgarian rural economy. Khidro i meteorolog 13 no.4:43-49 '64.

OLIKOV, D.

Water conservation of alfalfa, and its influence on the moisture  
of Chernozem soils. Khidro i meteorolog 13 no.5:40-49 '64.



I 9840-66 FCC  
ACC NR: AP6003956

SOURCE CODE: HU/0033/65/069/001/0027/0032

AUTHOR: Dilkov, Dilko (Sofia)

ORG: Bulgarian Hydrometeorological Service, Sofia

TITLE: Foundation of water-retaining irrigation using principles of agricultural meteorology [Paper presented at the 4th hydrometeorological Conference held in Kecskemet, Hungary from 15 to 19 September 1964]

SOURCE: Idojaras, v. 69, no. 1, 1965, 27-32

TOPIC TAGS: agriculture science, climatology, hydrometeorology, climatic condition, atmospheric precipitation

ABSTRACT:

Data presented on the utilization of the water content of deeper soil strata, compared to the annual variation of precipitation, suggest that water-retaining irrigation should not be practiced according a rigid pattern. Factors such as the actual meteorological character of the vegetation period of the preceding year, the water remaining in the soil at the end of the preceding summer, and the probability of a naturally occurring supplementation of water losses of the soil by autumn and winter precipitation should be considered. The data used in this report were gathered in the dark agricultural soil region of Northern Bulgaria. Orig. art. has: 3 figures and 1 table.

SUB CODE: 02, 04 / SUBM DATE: none

Card 1/1

DILKOVSKI, A.I., 1926.

Source: [illegible]

An industry which should be extended. Burvestel, item 7 no.5:21-22  
S-6 '64.

1. State Committee of Forestry and Forest Industries.

KACZENSKA, Maria; DIILLING-OSTROWSKA, Ewa

Studies on right- and left-handedness in normal subjects. Neur. &c  
polska 10 no.2;237-241 Mr-Apr '60.

1. Z Kliniki Neurologicznej A.M.G. Kierownik: prof. dr Z.Majewska  
(LATERALITY)

KACZENSKA, Maria; DILLING-OSTROWSKA, Ewa

Role of Minor's test in the determination of handedness. II,  
Neurologia etc. polska 11 no.1:47-51 Ja-F '61.

1. Z Kliniki Chorob Nerwowych AM w Gdansk Kierownik: prof. dr  
Z. Majewska.

(LATERALITY)

MAJEWSKA, Zofia; BOGDANOWICZ, Irena; DILLING-OSTROWSKA, Ewa

On the problem of speech disorders in children. Neurol. etc., polska  
11 no.3:313-320 '61.

1. Z Oddzialu Neurologii Dzieciecej im. Janusza Korczaka w Gdansk  
Kierownik: prof. dr Z. Majewska.  
(SPEECH DISORDERS in inf & child)

KACZENSKA, Maria; DILLING-OSTROWSKA, Ewa

Changed left-handedness in the light of statistics. Neurol neurochir  
psych 12 no.2:187-190 Mr-Apr '62.

1. Klinika Chorob Nerwowych, Akademia Medyczna, Gdansk-Wrzeszcz, ul.  
Debinki 7. Kierownik: prof. dr Z. Majewska.

MAJEWSKA, Zofia; BOGDANOWICZ, Irena; DILLING-OSTROWSKA, Ewa

Contribution to the problem of absence of the corpus callosum.  
(Comparison of clinical and radiological pictures in the light  
of catamnestic studies). Neurol. neurochir. psychiat. pol. 13  
no.4:505-508 '63.

1. Z Kliniki Neurologicznej AM w Gdansk Kierownik: prof. dr  
Z. Majewska.

(CORPUS CALLOSUM) (ABNORMALITIES)  
(RADIOGRAPHY)

SIELICKA, Maria; BOGDANOWICZ, Irena; DILLING-OSTROWSKA, Ewa;  
SZELOZYNSKA, Katarzyna; KACZENSKA, Maria

Forced exercise of the right hand as a cause of neuroses in  
children. Pediat. pol. 38 no.4:405-408 '63.

1. Z Wojewódzkiej Przychodni Zdrowia Psychicznego w Gdansk  
Dyrektor: lek. med. M. Sielicka z Poradni Zdrowia Psychicznego  
PKP w Gdansk Kierownik: dr med. S. Dybowski i z Oddziału  
Neurologii Dziecięcej im. Janusza Korczaka AM w Gdansk  
Kierownik: prof. dr med. Z. Majewska.  
(LATERALITY) (NEUROSES) (EXERCISE THERAPY)

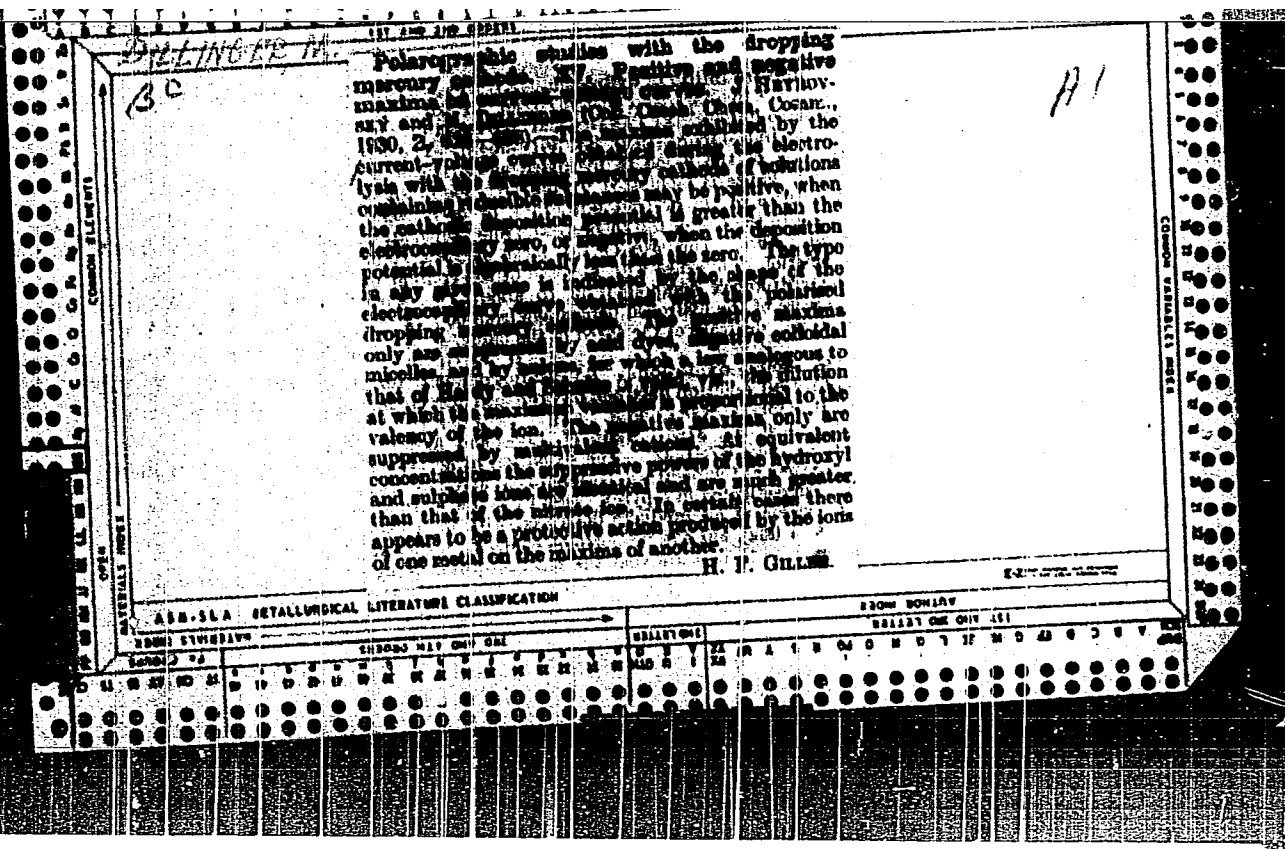


DILLING-OSTROWSKA, Ewa; SZKŁOZYNSKA, Katarzyna; MIERZEJEWSKI, Tadeusz;  
PRYCKOWSKI, Jerzy

A case of post-trauma in thrombosis of the common carotid artery in a 6-year-old boy. Neurol., neurochir., psychiat. Pol. 15 no.1:179-181 Ja-F'65.

1. Z Oddziału Neurologii Dziecięcej im. J. Korczaka, Kliniki Neurologicznej Akademii Medycznej w Gdańsku (Kierownik: prof. Z. Majewska) ; z Zakładu Radiologii Akademii Medycznej w Gdańsku (Kierownik: prof. dr. W. Grabowski [deceased]) oraz z II Kliniki Chirurgicznej Akademii Medycznej w Gdańsku (Kierownik: prof. dr. K. Debicki).

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<p><i>ca</i></p> <p><i>DILLINGER M</i></p> <p><i>4</i></p> <p>Polarographic studies with the dropping mercury cathode. VII. Current maxima occurring in electrolysis of mercuric cyanide solutions. M. DILLINGER. <i>Collection Czechoslov. Chem. Communications</i> 1, 638-47 (1929); cf. C. A. 23, 3390. Current-voltage curves and electrocapillary curves for Hg(CN)<sub>2</sub> solns. plus electrolytes showed the same kind of maxima as solns. contg. the same electrolytes and O<sub>2</sub> (cf. Heyrovský and Šimůnek, C. A. 24, 2675; Rasch, C. A. 24, 1780). Atm. O was excluded during the present work by a special buret (cf. Hmelianova and Heyrovský, C. A. 22, 2515). The following data were found for the maxima on the current-voltage curves: (1) for 0.001 M Hg(CN)<sub>2</sub>, the max. is highest when the soln. contains electrolytes to give the same cond. as 0.0025 N HCl, irrespective of the rate of dropping of the Hg. (2) For other concns. of Hg(CN)<sub>2</sub>, the concn. of electrolyte has to be altered proportionally to obtain the highest max. (3) The height of the highest max. is approx. proportional to the concn. of Hg(CN)<sub>2</sub>. The explanation offered is that at the max. current the rate of adsorption of Hg(CN)<sub>2</sub> equals the rate of its electroreduction, while at the highest max. the rate of adsorption of Hg(CN)<sub>2</sub> is equal to the rate of adsorption of the electrolyte into the Hg-soln. interface.</p> <p>EDWARD B. SANIGAR</p>																																																																																																																																																											
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DILLINGER, MILOSLAV

CZECHOSLOVAKIA / Physical Chemistry. Electrochemistry. B

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60363.

Author : Miloslav Dillinger.

Inst : -

Title : Study of Polarographic Maxima. II. Study of Electrolyte Flow to Mercury Drop Electrode.

Orig Pub: Chem. zvesti, 1957, 11, No 12, 693-695.

Abstract: It is shown that the elimination of adhesion of water films on the glass parts of the apparatus does not influence the height of polarographic

L 1608-66 EWP(j)/T RM  
ACCESSION NR: AP5024488

CZ/0043/64/000/011/0823/0829

31  
30  
13

AUTHOR: Holba, V. (Gol'ba, V.) (Graduate chemist, Candidate of sciences) (Bratislava);  
Dillinger, M. (Professor, Doctor) (Bratislava); Cunderlikova, G. (Chunderlikova, G.)  
(Bratislava)

TITLE: Study of the kinetics of substitution reactions of chromium complexes (II).  
Combination of dibromo chromous ion with 4 water molecules, and bromo-chromous  
ion with five water molecules with water

SOURCE: Chemické zvesti, no. 11, 1964, 823-829

TOPIC TAGS: chemical kinetics, water, ion, bromine, chromium, aqueous solution,  
solution acidity, molecule, substituent

ABSTRACT: Combination with water as a function of the pH of the solution was in-  
vestigated. Liberated ions of Br were titrated potentiometrically. Velocity constant  
of the reaction are presented. Orig. art. has: 8 formulas, 5 graphs.

ASSOCIATION: Katedra anorganické a fyzikální chemie Přírodovědecké fakulty

Card 1/2

L 1608-66

ACCESSION NR: AP5024488

Univerzity Komenského, Bratislava (Department of Inorganic and Physical Chemistry  
of Faculty of Natural Sciences, Comenius University)

SUBMITTED: 12Jun64

ENCL: 00

SUB CODE: IC, QC

NR REF SOV: 000

OTHER: 003

JPRS

Card 2/2 *dy*

S/195/62/003/006/004/011  
E075/E436

AUTHORS: Sarayeva, V.V., Bakh, N.A., Dakin, V.I.,  
Dillinger, P.

TITLE: Influence of temperature and dose rate on the  
radiolysis and the radiation induced oxidation of  
diisopropylether

PERIODICAL: Kinetika i kataliz, v.3, no.6, 1962, 865-869

TEXT: The object of the work was to elucidate the mechanism of decomposition and oxidation of diisopropylether under the action of  $\alpha$  and  $\gamma$  irradiation. The ether was freed from peroxides, water and carbonyl compounds and irradiated after evacuation, or in the presence of oxygen, at a range of temperatures (-35 to 70°C). The yield of carbonyl compounds reached a sharp maximum ( $G = 14.5$  mole/100 eV) at about 25°C. At 35°C the yield decreased to about 3 mole/100 eV. Temperature did not affect the formation of alcohols. The carbonyl compounds were formed by chain reaction with an activation energy of 11 kcal/mole, the chain growth being determined by the interaction of isopropyl radicals with the ether molecules. The formation of carbonyl compounds by the chain

Card 1/3

S/195/62/003/006/004/011  
EO75/E436

## Influence of temperature ...

reaction was confirmed by the increase of their yield with increasing radiation dosage. No corresponding increase occurred for alcohols, which indicated that they are not formed by chain reaction. In the presence of  $O_2$ , the yields of peroxides and carbonyl compounds remain stable at 5.4 and 6.6 mole/100 eV respectively. Above  $10^\circ C$ , the yield increases for all the radiolysis products investigated to about 250 mole/100 eV at  $70^\circ C$ . The values of activation energies for the oxidation above  $10^\circ C$  (15 and 20 kcal for peroxides and carbonyl compounds respectively) indicate that the peroxide results from the reaction of  $O$  with an ether molecule, determining the development of a chain reaction, and the carbonyl compounds result from the decomposition of peroxide radicals. For the peroxides  $G = kI^{-0.5}$  at  $30^\circ C$ , where  $I$  - dose intensity corresponding to the chain process. For carbonyl compounds  $G = kI^{-0.7}$ , also a chain reaction. Low yields for acids and alcohols indicate that they are not formed by chain reactions, but possibly by isomerization and decomposition of peroxide radicals. These reactions are realized by the excess energy possessed by the radiolysis products at the moment of their

Card 2/3



Influence of temperature ...

S/195/62/003/006/004/011  
E075/E436

formation. There are 5 figures and 1 table.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im.  
M.V.Lomonosova (Moscow State University imeni  
M.V.Lomonosov)

SUBMITTED: October 25, 1961

Card 3/3

TOLGYESSY, Juraj, doc., inz., CSc.; DILLINGER, Pavol, promovany chemik

Examination of the use of beta ray absorption for determining uranium and thorium in aqueous solutions. Chem zvesti 17 no.6: 439-444 '63.

1. Katedra radiochemie a radiacnej chemie, Slovenska vysoka skola technicka, Bratislava, Kollarovo namesti 2.

TOIGYESSY, Juraj; DILINGER, Pavel

Beta absorption radiometric precipitation titrations. Jaderna energie 10 no. 3:86 Mr '64.

1. Department of Radiochemistry and Radiation Chemistry, Faculty of Chemistry, Slovak Higher School of Technology, Bratislava.

ULICKY, Ladislav, inž., C.Sc.; DILLINGEROVA, Tamara, promovana  
chemicka

Basic crystallographic data on p-bromophenylisothiocyanate. Chem  
zvesti 16 no.10:758-761 0 '62.

1. Katedra fyzikalnej chemie, Slovenska vysoka skola technicka,  
Bratislava, Kollarovo namesti 2.